



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,322	09/25/2003	John Emmett Riordan III	1137-11	4132

23117 7590 11/07/2006

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

SCHNEIDER, CRAIG M

ART UNIT PAPER NUMBER

3753

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/669,322	RIORDAN ET AL.	
	Examiner	Art Unit	
	Craig M. Schneider	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/14/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/28/2006 has been entered.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: Line 10 reads "said connecting member" but should be --and said connecting member--. Appropriate correction is required.
3. Claims 13 and 14 are objected to because of the following informalities: The preamble for both states an "apparatus" but it should be --system--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-2, 4-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

Art Unit: 3753

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitations of "no more than a pair of plates" in claim 1 and "no more than two plates" in claim 12 does not have clear support from the originally filed disclosure.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 1-2 and 4-11 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Marandi (5,575,308) in view of Heenan et al. (3,825,186).

Marandi discloses an apparatus for restraining movement of a valve (10) embedded in the ground comprising an anchor (30) for securement to the valve and including an anchor body (31) for disposition in the ground and having no more than a pair of plates (32 and 33) spaced from one another and a connecting member (45, 46, 34, and 35)(col. 5, lines 17-23 and 45-48) carried by the anchor body connecting the

Art Unit: 3753

plates to one another as seen in Figures 3 and 4 (col. 4, lines 18-30) and the connecting member and the plates defining a lateral opening (area between 50 and 53) as seen in Figures 3 and 4 for receiving and engaging the valve to substantially minimize or eliminate rotational movement of the valve relative to the anchor in response to a torque applied to the valve to open or close the valve (col. 4, lines 56-65). Marandi further discloses a means (42) carried by the anchor body for engaging the valve to substantially eliminate or minimize rotational movement of the valve relative to the anchor upon rotational movement applied to the valve to open or close the valve (col. 4, lines 35-55).

Marandi claims all the features of the claimed invention except that the plates are extending generally vertically in discrete planes non-parallel to one another and which planes, when extended, intersect one another along a generally vertical line wherein the planes and the plates lying in the planes are oriented about 90° relative to one another, with the vertical line lying within the anchor body. Heenan et al. disclose having at least first and second plates (two of the four will be used since the term comprising is used in the claim)(10)(col. 3, lines 42-51) spaced from one another and extending generally vertically in discrete planes non-parallel to one another and which planes, when extended, intersect one another along a generally vertical line wherein the planes and the plates lying in the planes are oriented about 90° relative to one another with the vertical line lying within the connecting member.

Art Unit: 3753

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the plates of Lovell onto the valve anchor of Marandi, in order to provide stabilization if a torque is applied to the anchored valve.

Regarding claim 2, Marandi-Heenan et al. in combination disclose that the connecting member lies to one side of the vertical line.

Regarding claim 4 and 15, Marandi-Heenan et al. in combination disclose that the anchor has a center of support against vertical movement, the center of support lying laterally offset from the vertical line and closely spaced to or coincident with the vertical axis.

Regarding claim 5, Marandi-Heenan et al. in combination disclose that the connecting member includes a plurality of angularly-related flats (50-53) for engagement about the valve (col. 4, 30-34)(Marandi).

Regarding claim 6, Marandi-Heenan et al. in combination disclose that the flats extend along the connecting member between upper edges of the plates, and define a recess in the connecting member (40)(Marandi) having a lateral opening for receiving the valve (col. 4, lines 30-34)(Marandi).

Regarding claim 7, Marandi-Heenan et al. in combination disclose that the connecting member includes an arm (43) having a first flat (53) in generally horizontal registration with a second flat (50), the first and second flats lying diametrically opposite one another and to one side of the vertical line as seen in Figure 4 of Marandi.

Art Unit: 3753

Regarding claim 8, Marandi-Heenan et al. in combination disclose that the connecting member includes a reinforcing plate extending generally horizontally between said vertically extending plates as seen in figure 4 of Marandi.

Regarding claim 9, Marandi- Heenan et al. in combination disclose that the connecting member includes a plurality of angularly-related flats facing inwardly from and formed along an inner edge of the horizontal plate, the flats defining a recess in the connecting member having a lateral opening for receiving the valve.

Regarding claim 11, Marandi-Heenan et al. in combination disclose that the plates each have a height to width ratio of 2:1 as seen in Figure 3 of Heenan et al..

9. Claims 12-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marandi (5,575,308) in view of Nelson (3,342,444).

Marandi discloses an in ground irrigation system comprising a valve (10) having a central vertical axis and threaded onto a pipe about the vertical axis, the valve including a valve body having a plurality of flats (60) about the axis (col. 6, 13-17); an anchor (30) for securement to the valve and including an anchor body (31) disposed in the ground and extending at least partially about the valve, the anchor body including no more than two plates (32 and 33) spaced from one another and extending generally vertically; and a connecting member (45, 46, 34, and 35)(col. 5, lines 17-23 and 45-48) carried by the anchor body connecting the plates to one another as seen in Figures 3 and 4(col. 4, lines 18-30), the connecting member and the plates defining a lateral opening for receiving and engaging the valve, the anchor body including a recess having a plurality of angularly related flats facing inwardly towards and engaging the

Art Unit: 3753

flats of the valve body to substantially preclude rotation of the valve relative to the anchor body in response to a torque applied to the valve to open or close the valve (col. 4, lines 56-65). Marandi further discloses a means (42) carried by the anchor body for engaging the valve to substantially eliminate or minimize rotational movement of the valve relative to the anchor upon rotational movement applied to the valve to open or close the valve (col. 4, lines 35-55).

Marandi claims all the features of the claimed invention except that the plates are in discrete planes non-parallel to one another and which planes, when extended, intersect one another along a generally vertical line laterally offset from the axis. Nelson discloses having at least first and second plates (30)(col. 2, lines 24-44) spaced from one another and extending generally vertically in discrete planes non-parallel to one another and which planes, when extended, intersect on another along a generally vertical line laterally offset from the axis as seen in Figure 4.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the plates of Nelson onto the valve anchor of Marandi, in order to compact the earth to provide stabilization if a torque is applied to the anchored valve (col. 1, lines 34-37).

Regarding claim 15, Marandi-Nelson in combination disclose that the anchor has a center of support against vertical movement, the center of support lying laterally offset from the vertical line and closely spaced to or coincident with the vertical axis.



Art Unit: 3753

10. Claims 12, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marandi (5,575,308) in view of Lovell (3,850,128) and in further view of Nelson (3,342,444).

Marandi discloses an in ground irrigation system comprising a valve (10) having a central vertical axis and threaded onto a pipe about the vertical axis, the valve including a valve body having a plurality of flats (60) about the axis (col. 6, 13-17); an anchor (30) for securement to the valve and including an anchor body (31) disposed in the ground and extending at least partially about the valve, the anchor body including no more than two plates (32 and 33) spaced from one another and extending generally vertically; and a connecting member (45, 46, 34, and 35)(col. 5, lines 17-23 and 45-48) carried by the anchor body connecting the plates to one another as seen in Figures 3 and 4(col. 4, lines 18-30), the connecting member and the plates defining a lateral opening for receiving and engaging the valve, the anchor body including a recess having a plurality of angularly related flats facing inwardly towards and engaging the flats of the valve body to substantially preclude rotation of the valve relative to the anchor body in response to a torque applied to the valve to open or close the valve (col. 4, lines 56-65). Marandi further discloses a means (42) carried by the anchor body for engaging the valve to substantially eliminate or minimize rotational movement of the valve relative to the anchor upon rotational movement applied to the valve to open or close the valve (col. 4, lines 35-55).

Marandi claims all the features of the claimed invention except that the plates are in discrete planes non-parallel to one another and which planes, when extended,

Art Unit: 3753

intersect one another along a generally vertical line laterally offset from the axis. Lovell discloses having at least first and second plates (18)(col. 2, lines 24-44) spaced from one another and extending generally vertically in discrete planes non-parallel to one another. Nelson further discloses having plates (30) at the end of the radiating plates (16) plates and which planes of the plates (30)(col. 2, lines 24-44), when extended, intersect one another along a generally vertical line.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the two plates of Lovell with the spade portion of Nelson onto the anchor of Marandi, in order to add more stability with the two plates of Lovell and the pincer action of the spade plates of Nelson (col. 2, lines 44-54).

### ***Response to Arguments***

11. Applicant's arguments filed 9/5/06 have been fully considered but they are not persuasive. The applicant argues that the prior art of record does not disclose two plates and therefore the rejection would be overcome by the limitation of "no more than a pair of plates". The examiner respectfully disagrees with this the base reference of Marandi discloses two plates and the plates are being altered to obtain the desired orientation of the plates. The final combination of the references still only has two plates.

### ***Conclusion***

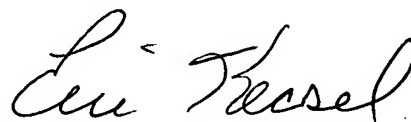
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig M. Schneider whose telephone number is (571) 272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

Art Unit: 3753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMS *cms*  
October 31, 2006



ERIC KEASEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700